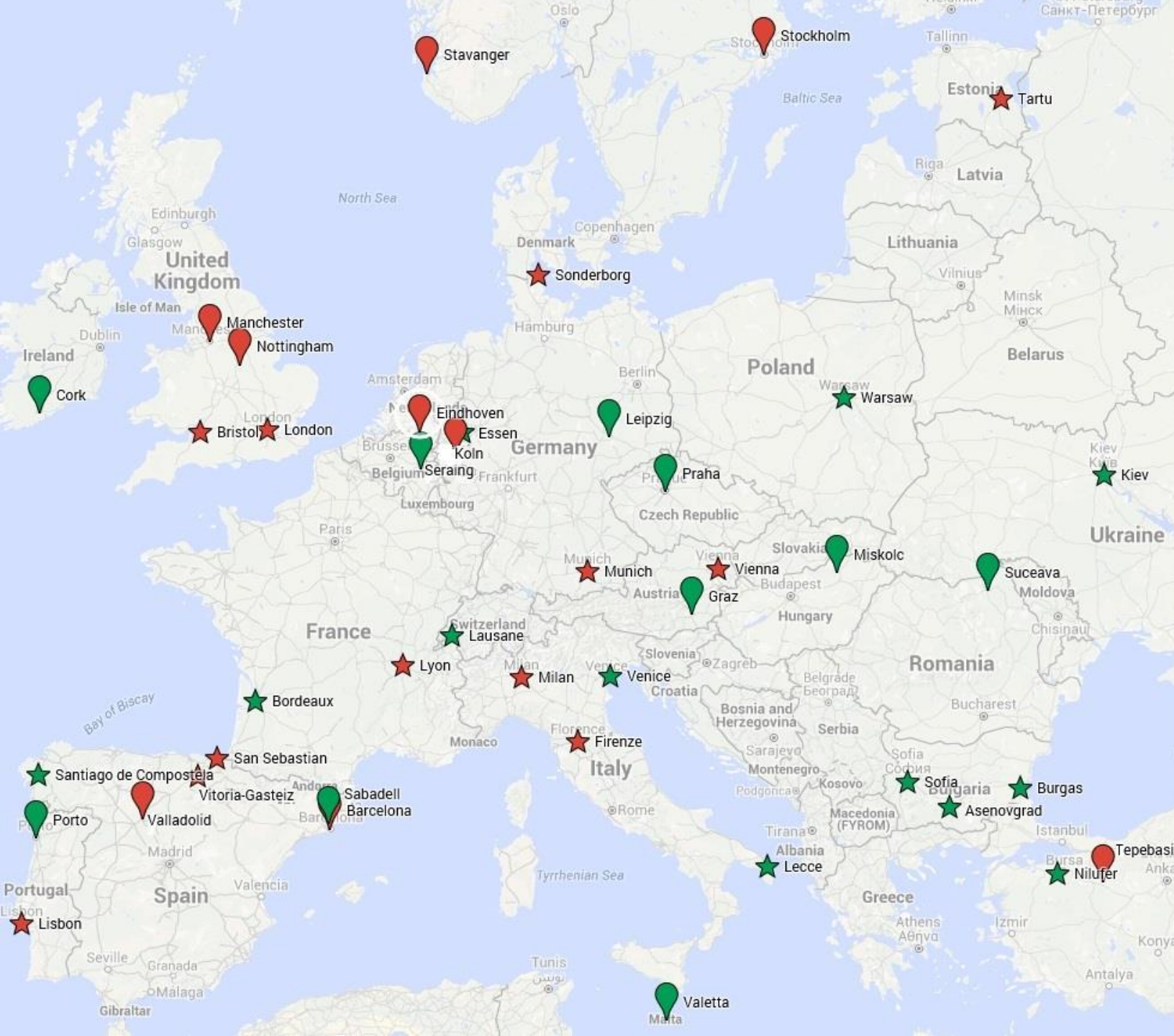# Contents

- **Policy Context**

- **Smart Cities Context**

- **Portuguese cities involvement in EU initiatives**

- **H2020 – Smart Cities – call SCC1**

- **Regional Funds**

Smart Cities and Communities (SCC)

- **Smart and Sustainable Cities** – cross-cutting

- **Sustainable, cost-effective and replicable** district-scale solutions at the intersection of **energy, transport** enabled by **ICT**

- **Intelligent, user-driven and demand-oriented** city infrastructure and services

Energy

H2020 - SCC1 calls

- 2017 will be the **4th year** of lighthouse projects and the network is steadily growing.

- We already have **27 Lighthouse cities** and **30 Follower cities** (calls 2014-15-16).

- They do not operate in isolation but are now forming a **lighthouse collaboration** network.

Map legend:
- 2015 Leader (red star)
- 2015 Follower (green star)
- 2014 Leader (red pin)
- 2014 Follower (green pin)

To be updated end of 2016 once the Grant Agreements are signed.

European Commission

H2020 - SCC1 call 2017

- **'Lighthouse project'** approach continued

- SCC-1-2017 has been **updated** following stakeholder feedback

- **Not identical** with the text of topic SCC-1-2016

- Text passages covered by Frequently Asked Questions (**FAQ**) were edited for clarity

- Important aspects re-emphasized

Scope

- Develop and test:

    - **integrated innovative solutions** at district scale.

    - **innovative business models** that enable deployment at large scale

- Act as **exemplars** for their region by **helping to plan** the **replication of solutions**, adapted to different local conditions.

Integration scope

- smart **buildings**,

- smart **grids**

- **energy storage**,

- **electric vehicles** and smart charging

- latest generation **ICT platforms** based on open specifications

Capitalizing on synergies between components to increase efficiency and self-consumption and reduce costs.

Energy

Each project must

- Be realised in **3 new lighthouse cities** that are situated in different EU Member states or associated countries.

- Involve **at least 3 follower cities** from at least 3 different EU Member states or associated countries (that are different also from the countries of the lighthouse cities of the project).

- Have **Sustainable Energy Action Plan** (SEAP), positively evaluated by the Covenant of Mayors **before submitting** a proposal.
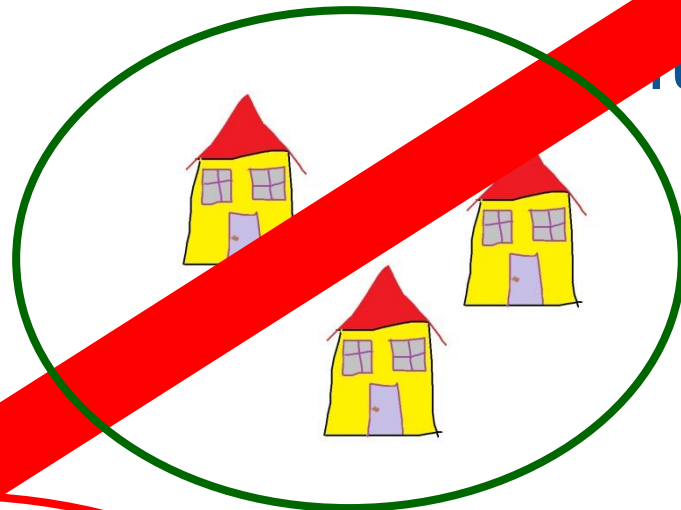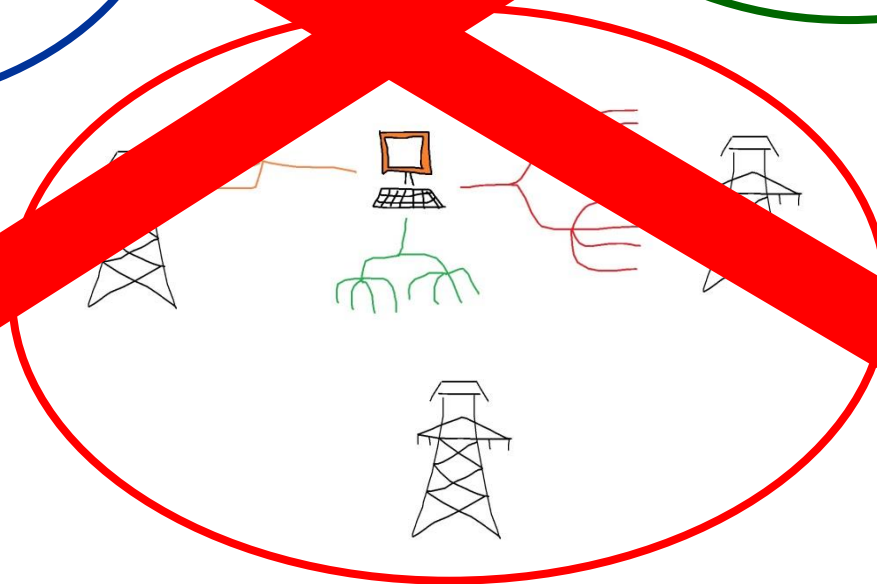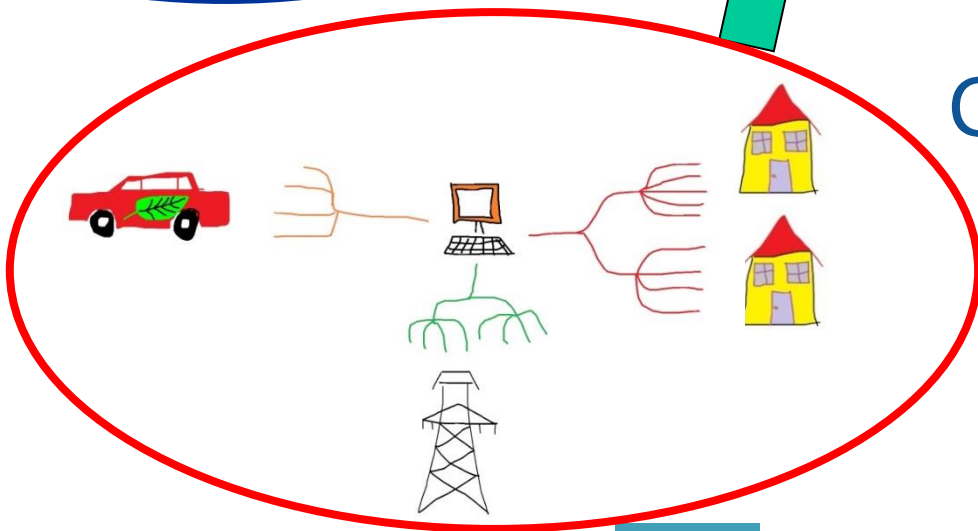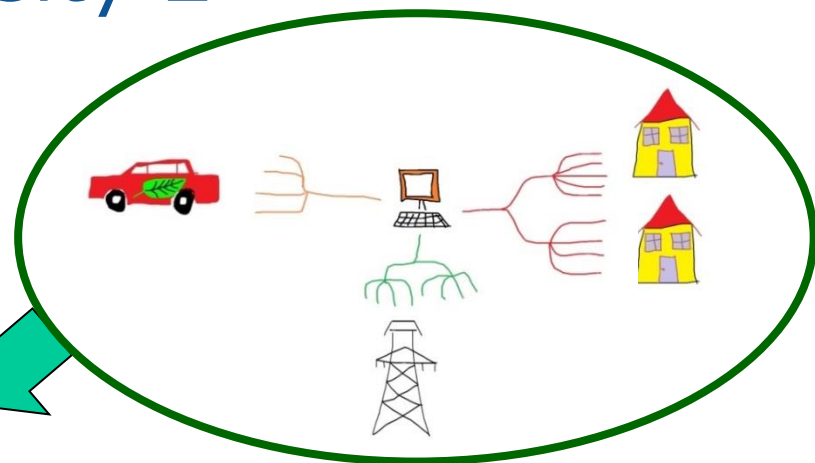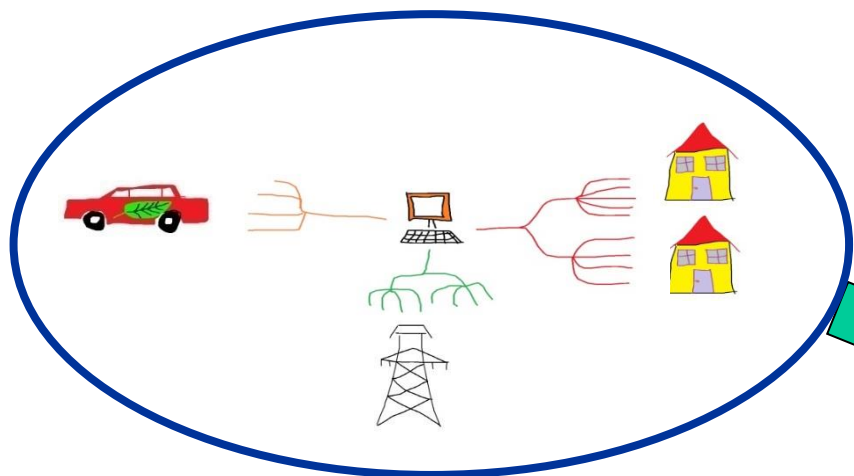
City 1

City 2

City 3

European
Commission

Energy

City 1

City 2

City 3

Energy

Include area maps in proposals

Indicate boundaries of affected areas

Important aspects

- A city can be funded as a **lighthouse city only once under Horizon2020**

- **Follower cities** are defined as cities that have yet to acquire the full technical competence needed to become a lighthouse city.

- **Performance monitoring** for at least 2 years during the project.

- Incorporate all **performance data** into Smart Cities and Communities Information System SCIS

Important aspects

- Convincing and **realistic demonstration** work

- The initial **investment plans** (to be refined during the execution of the project) shall show that **private capital** can take over further investments at low technical and financial risks for **replication**

- foresee about 2 % to 3% of the requested funds for **inter-project cooperation**

Energy

Non-eligible costs

- **construction** (including scale of unit costs)

- **retrofitting** (including scale of unit costs)

- **insulation** of the building envelope, good windows; heat pumps, and other appliances

- purchasing/leasing **electric vehicles**

- acquisition of standard **ICT tools**

- conventional **RES** and their mounting

    (RES: Renewable Energy Sources)

Eligible costs (1)

All those **innovative aspects** that transform the city into a smart city, such as <u>for example</u>:

- Smart **<u>integration</u>** of the energy grids with RES, with electricity storage and heat storage at the **district level**

- Only the innovative parts of **RES**, suited for smart integration

- Innovative part of **building management** that is leading to a deep integration with the local energy system

Eligible costs (2)

- Integration of **storage** with all grids

- Smart **storage** (electricity, heat or cold) and its management for maximising **self-consumption**

- Innovation parts of **e-vehicles/infrastructre** suited for smart integration

- Economic research for and development of highly innovative approaches and testing of integrated **business models**

Eligible costs (3)

- **Platforms** based on open specifications with open application program interfaces (API)

- Further refinements of the initially submitted **replication plans**

- **Training and education** within and between cities

Foreseen contribution from the EU

between EUR **12** to **18** million / selected project

Total budget: 69.5 million

Submission deadline: **14 February 2017**

Evaluation Criteria

Excellence	Impact **Factor 1.5 !**	Quality & efficiency of implementation
Clarity and pertinence of the objective Credibility of the approach	Concerning the expected impacts listed in the work programme	Coherence and efficiency of the work plan – allocation of tasks and resources Competence of participants Appropriateness of the management structure and procedures including risk and innovation management

Expected Impacts

- Put in practice a **bankable solution** for a challenge identified by the city

- Increase the **energy efficiency** on district scale

- Increase significantly the share of renewable energies and their **integration** into the energy system

- Roll-out of **electric vehicles** in cities

- Increase local **air quality**

- Create stronger links and **active cooperation between cities** in a large number of Member States

Facilitate the reading of your proposal

- M   well
- Ju
- Pr
- Us
- Us
- Us
- Ke

Official call text

https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/scc-1-2016-2017.html

Thank you very much for your attention!

Questions?

More information on :

- Energy Efficiency Directives:
   https://ec.europa.eu/energy/en/topics/energy-efficiency

- Smart Cities Projects: http://smartcities-infosystem.eu/

- Covenant of Mayors: www.covenantofmayors.eu

- European Innovation Partnership on Smart Cities:
   https://eu-smartcities.eu/